

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently Amended) A method for operating high-bit-rate data transmission devices on a subscriber line connecting a subscriber terminal device and a telephone exchange, wherein voice information and low-bit-rate data can also be transmitted on the subscriber line, and wherein during a transmission of high-bit-rate data, a connection for transmitting the high-bit-rate data bypasses a core region of the telephone exchange and connects to a data transmission network as a permanent connection between a high-bit-rate data transmission device at the subscriber side and a high-bit-rate data transmission device at the telephone exchange side and an access device of the data transmission network, the method comprising the steps of:

in a high-bit-rate data transmission device that terminates a subscriber line at a telephone exchange side and in a high-bit-rate data transmission device that terminates the subscriber line at a subscriber side, outside a context of a data transmission, operating only a signal tone detector to detect an occurrence of a pilot tone in an upstream or downstream channel indicating a beginning of a data transmission; and

operating remaining parts of the high-bit-rate data transmission devices only when the signal tone detector detects the occurrence of the pilot tone in the upstream or downstream channel, wherein a digital interface, digital signal processor, analog interface, and a line driver in the high-bit-rate transmission device are switched into an operative state only upon detection of the pilot tone.

2. (Cancelled)

3. (Previously presented) The method according to claim 1, further comprising operating the signal tone detector continuously.

4. (Previously presented) The method according to claim 1, further comprising operating the signal tone detector at definite intervals.

5. (Currently Amended) An arrangement for transmitting high-bit-rate data on a subscriber line, said subscriber line for transmitting high-bit-rate data, voice information and low-bit-rate data, said arrangement comprising:

a subscriber terminal device having a first high-bit-rate data transmission device connected to a subscriber side of a subscriber line, said first high-bit-rate data transmission device having a number of first parts being operated only during a transmission and having at least one second part, other than said first parts, being operated outside a context of a data transmission and for evaluating a criterion which indicates a beginning of a data transmission and which is applied for purposes of activating said first high-bit-rate data transmission device, wherein the at least one second part of the first high-bit-rate data transmission device is a signal tone detector configured to detect an occurrence of a pilot tone in an upstream or downstream channel and the number of first parts of the first high-bit-rate data transmission device are

operated only when the signal tone detector detects the occurrence of the pilot tone in the upstream or downstream channel, and wherein only the signal tone detector is operable when data is not being transmitted;

a telephone exchange having a second high-bit-rate data transmission device connected to a network side of the subscriber line, said second high-bit-rate data transmission device having a number of first parts being operated only during a transmission and having at least one second part, other than said first parts, being operated outside a context of a data transmission and for evaluating a criterion which indicates a beginning of a data transmission and which is applied for purposes of activating said first high-bit-rate data transmission device, wherein the at least one second part of the second high-bit-rate data transmission device is a signal tone detector configured to detect an occurrence of a pilot tone in an upstream or downstream channel and the number of first parts of the second high-bit-rate data transmission device are operated only when the signal tone detector detects the occurrence of the pilot tone in the upstream or downstream channel, and wherein only the signal tone detector is operable when data is not being transmitted, wherein a digital interface, digital signal processor, analog interface, and a line driver in the high-bit-rate transmission device are switched into an operative state only upon detection of the pilot tone; and

an access device for accessing a network connected via permanent connection to said first and second high-bit-rate data transmission devices, said permanent connection for transmitting said high-bit-rate data and bypassing a core region of said telephone exchange.

6. (Currently Amended) A method for operating high-bit-rate data transmission devices on a subscriber line connecting a subscriber terminal device and a telephone exchange and having a permanent connection between a high-bit-rate transmission device at a subscriber side and a high-bit-rate transmission device at a telephone exchange side, comprising:

monitoring the subscriber line for an occurrence of a pilot tone in an upstream or downstream channel of a xDSL system, for detection in a signaling tone detector of a high-bit-rate transmission device, wherein all components of the high-bit-rate transmission device other than the signaling tone detector are inoperative when data transmission does not occur; and

switching the respective high-bit-rate transmission device into an operative state upon detection of a pilot tone,

wherein an occurrence of the pilot tone indicates a beginning of data transmission, and all remaining parts components of the high-bit-rate transmission device are switched into an operative state only when the pilot tone is detected, wherein a digital interface, digital signal processor, analog interface, and a line driver in a high-bit-rate transmission device are switched into an operative state only upon detection of the pilot tone.

7. (Cancelled).

8. (Previously presented) The method of claim 6, wherein the step of monitoring the subscriber line for an occurrence of a pilot tone occurs continuously.

9. (Currently Amended) The method of claim 6, wherein the step of monitoring the subscriber line for an occurrence of a pilot tone occurs at regular intervals.

10. (Previously presented) A system for transmitting high-bit-rate data on a subscriber line between a subscriber terminal and a network terminal, said high-bit-rate data to be transmitted in conjunction with any of voice information or low-bit-rate data, comprising:

a first high-bit-rate transmission device connected to a subscriber side of the subscriber line; and

a second high-bit-rate transmission device connected to a network side of the subscriber line,

wherein the high-bit-rate transmission device at either a subscriber side or network side comprises a signaling tone detector for detecting occurrences of a pilot tone in an upstream or downstream channel of an xDSL system, the signaling tone detector operates separately from all other components of the high-bit-rate transmission device for performing data transmission, and the all other components of the high-bit-rate transmission device for performing data transmission are inoperative when data transmission does not occur and are switched into an operative state only when the pilot tone is detected, wherein a digital interface, digital signal processor, analog interface, and a line driver in the high-bit-rate transmission device are switched into an operative state only upon detection of the pilot tone.

11. (Previously presented) The system of claim 10, wherein all other components of the high-bit-rate transmission device for performing data transmission include at least one of a digital interface, a digital signal processor, an analog interface, and a line driver.

12. (Currently Amended) A high-bit-rate transmission device for performing high-bit-rate data transmission between a subscriber side and a network side of a subscriber line, comprising:

a signaling tone detector for detecting occurrences of a pilot tone in an upstream or downstream channel of an xDSL system; and

a plurality of components other than the signaling tone detector for performing data transmission, operating separately from the signaling tone detector, wherein all components of the plurality of components other than the signaling detector are inoperative when data transmission does not occur, and

wherein an occurrence of the pilot tone indicates a beginning of data transmission, and any component of the plurality of components other than the signaling detector of the high-bit-rate transmission device is switched into an operative state only when the pilot tone is detected, wherein a digital interface, digital signal processor, analog interface, and a line driver in the high-bit-rate transmission device are switched into an operative state only upon detection of the pilot tone.

13. (Previously presented) The device of claim 12, wherein components for performing data transmission include at least one of a digital interface, a digital signal processor, an analog interface, and a line driver.

14. (Previously presented) The device of claim 12, wherein the high-bit-rate transmission device operates in an inactive state until a pilot tone is detected in the signaling tone detector.